

## Interview Summary

Application No.  
09/209,023

Applicant(s)  
Paton et al.

Examiner  
Jennifer Hunt

Group Art Unit  
1642



All participants (applicant, applicant's representative, PTO personnel):

(1) Jennifer Hunt

(3) \_\_\_\_\_

(2) Wendy Lee

(4) \_\_\_\_\_

Date of Interview Sep 25, 2001

Type: a) ☒ Telephonic      b) ☐ Video Conference  
c) ☐ Personal [copy is given to 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes      e) ☒ No. If yes, brief description:

Claim(s) discussed: \_\_\_\_\_

Identification of prior art discussed:

None

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments:

Left message for applicant that finality of the Office Action mailed 10-25-2000 was proper in light of applicant's amendments, and will not be withdrawn by the examiner.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

i) ☒ It is not necessary for applicant to provide a separate record of the substance of the interview (if box is checked).

Unless the paragraph above has been checked, THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

A RANDOMISED PHASE II STUDY OF GEMCITABINE/CISPLATIN ALONE AND WITH  
HERCEPTIN IN PATIENTS WITH HER2-POSITIVE NON-SMALL CELL LUNG CANCER (NSCLC)

Gatzemeier,U<sup>1</sup>, Groth, G<sup>1</sup>, Hirsh,V<sup>2</sup>, Butts,C<sup>3</sup>, Van Zandwijk,N<sup>4</sup>, Shepherd,F<sup>5</sup>, Rosso,R<sup>6</sup>, Howell,JD<sup>7</sup>  
1 Krankenhaus Grosshansdorf, Germany. 2 McGill University Montreal, 3 Cross Cancer Institute  
Edmonton, 5 Princess Margaret Hospital Toronto; Canada. 4 The Netherlands Cancer Institute,  
Amsterdam, Netherlands. 6 Istituto Scientifico dei Tumori Genova, Italy. 7 Roche Products Ltd. UK.



Herceptin has demonstrated improvements in survival and time to progression when added to chemotherapy in treating HER2-positive breast cancer. Improvements in treatment for NSCLC are needed and some lung cancers do show HER2 positivity. A randomised phase II study recruited 103 patients with stage IIIB-IV NSCLC. Median age was 59 and 72% of patients had adenocarcinoma. Patients were all HER2-positive as measured by immunohistochemistry (2+, 3+), FISH or high serum HER2 levels (>15ng/mL). Approximately 4% of patients were positive by high serum HER2 only. Patients were randomised to treatment with gemcitabine (1250mg/m<sup>2</sup> days 1+8) and cisplatin (75mg/m<sup>2</sup> day 1) 3 weekly cycles (control) or gem/cis 3 weekly cycles plus Herceptin (2mg/kg) weekly.

Patients in both the control and Herceptin arms have received a median of 6 cycles of therapy. The incidence of grade III/IV toxicity in the control vs Herceptin arms was: nausea, 52 vs 47%; stomatitis, 6 vs 6%; asthenia, 12 vs 13%; headache, 16 vs 32%; anaemia, 12 vs 16%; thrombocytopenia, 35 vs 36%; and leucopenia, 37 vs 34%. Clinically significant cardiac adverse events were limited to 2 patients (1 grade IV, 1 grade V) in the Herceptin arm.

Investigator-assessed response rates in the control/Herceptin arms were (95%CI) 41% (28-56) and 32% (20-47), respectively. Median TTP was (months; 95%CI) 7.2 months (6.4-9.7) and 6.3 months (5.5-7.2), respectively. Overall, there were 7 FISH-positive patients and 5 of these responded to treatment. Time to progression in the control arm patient was 5.4 months and in the Herceptin arm patients 4.6, 8.5, 9.6 and 11.1 months.

Herceptin and gem/cis appears to be a well-tolerated regimen. There was no evidence in this study that Herceptin adds to the efficacy of gem/cis in NSCLC. In the small numbers of patients who were FISH-positive and treated with Herceptin, the TTP was generally longer than the median. However, the majority of tumours were moderate overexpressors (90% 2+ by IHC) and a benefit in patients whose tumours overexpress/amplify HER2 at very high levels cannot be excluded.